



Center City Connector

City Council Transportation Committee Briefing

July 9, 2013

Presentation Overview

- Background
- Timeline
- Goals
- Public engagement
- Evaluation process and results
- Next steps


Background

Transit Master Plan priority

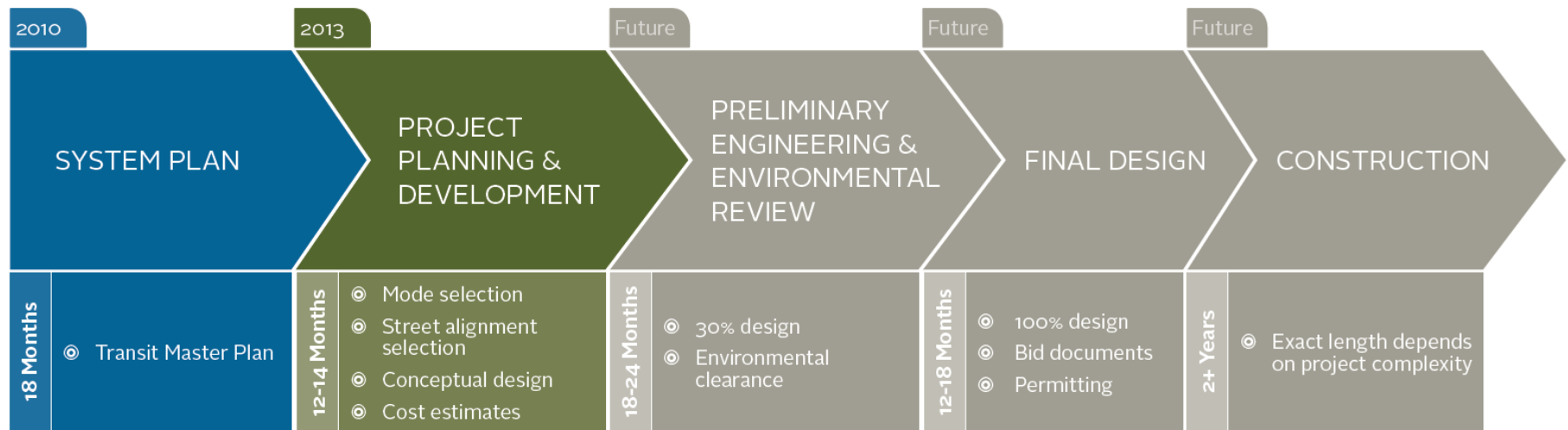
- Increase transit capacity
- Enhance transit service quality and reliability
- Improve transit options for people traveling between and within Center City neighborhoods and attractions



Project Need

- 
- Significant population and employment growth downtown
 - Growing demand for circulation trips and last-mile connections
 - Special mobility needs of tourists, visitors, and casual users
 - Affordable access to key social and human services
 - Connections for low-income workers

From Plan to Built Project



Center City Connector Transit Study

Study Timeline



Project Goals

ENHANCE

Enhance the customer experience on transit

CONNECT

Connect neighborhoods and improve local circulation

DEVELOP

Support local and regional economic development goals

THRIVE

Strengthen downtown and Center City neighborhoods

SUSTAIN

Improve and sustain human and ecological health

Stakeholder Interviews



Public Engagement

- Stakeholder Interviews
- Community Meetings



Media Outreach

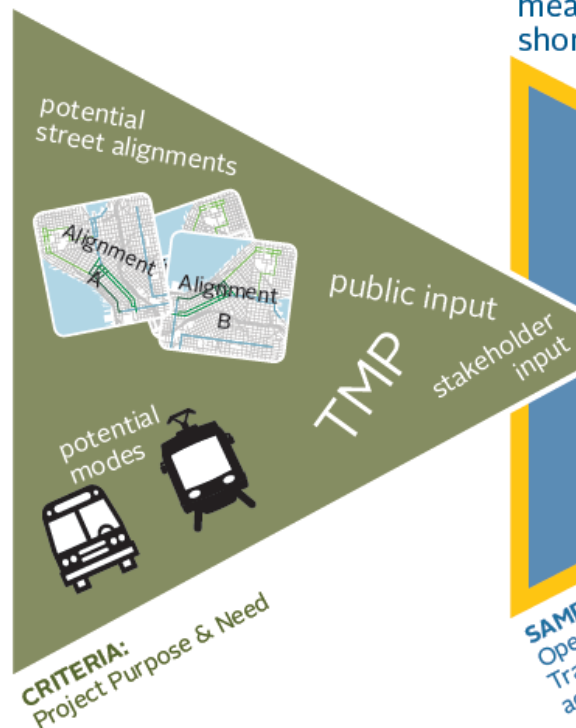


Open Houses

Study Evaluation Process

INITIAL SCREENING

A broad range of alternatives are screened, based on project purpose and need.



TIER ONE SCREENING

Qualitative & quantitative measures are applied to a short-list of alternatives.



TIER TWO EVALUATION

Rigorous evaluation of up to two 'build' & one 'no-build' alternatives



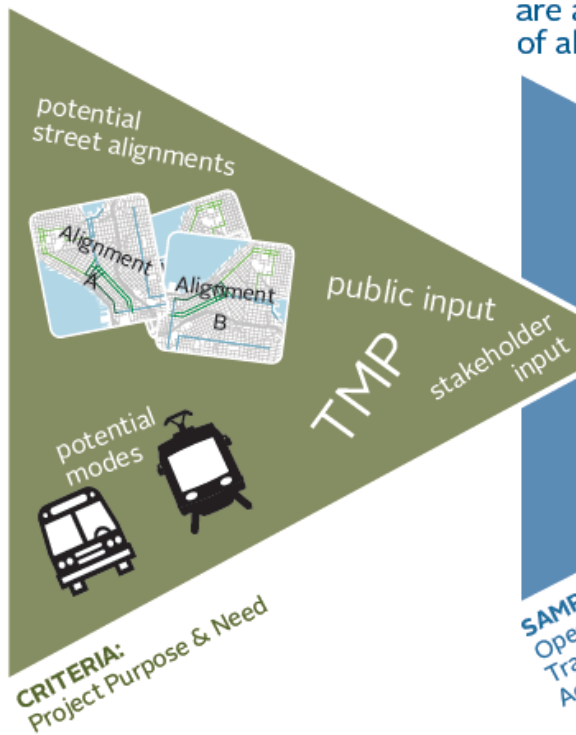
RECOMMENDED
LOCALLY
PREFERRED
ALTERNATIVE

LPA

Study Evaluation Process

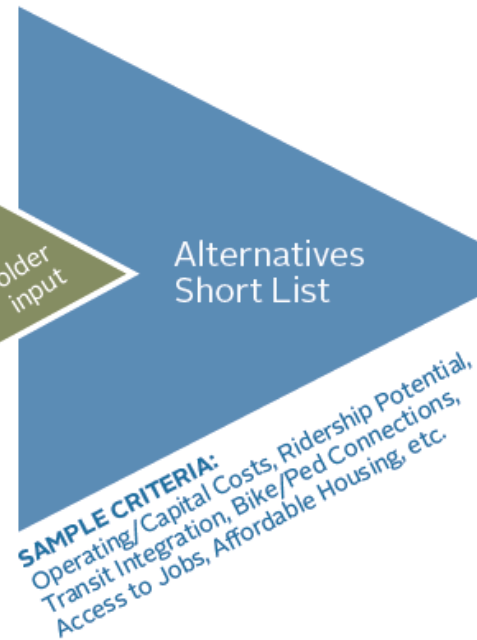
INITIAL SCREENING

A broad range of alternatives are screened based on project purpose and need.



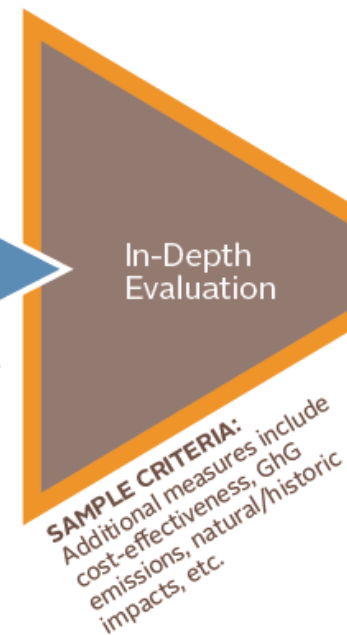
TIER ONE SCREENING

Qualitative & quantitative measures are applied to a short-list of alternatives.



TIER TWO EVALUATION

Rigorous evaluation of up to two 'build' & one 'no-build' alternatives.



RECOMMENDED
LOCALLY
PREFERRED
ALTERNATIVE
(LPA)

LPA

Initial Screening - Modes



Image from Flickr user Andrew Nash



Image from Flickr user wings777

**Streetcar-
Mixed-Traffic**

**Streetcar-
Exclusive**

**Enhanced
Bus**

Monorail

**Link
Light Rail**

Tier 1 Modes - Streetcar

MIXED-TRAFFIC



- ⦿ Primarily mixed-traffic operations.
- ⦿ Limited intersection signal priority.
- ⦿ Shorter spacing between stops.

EXCLUSIVE



- ⦿ Dedicated streetcar/transit lanes where feasible.
- ⦿ More extensive intersection signal priority.
- ⦿ Longer spacing between stops.

Initial Screening - Alignments

- A** 4TH/5TH
- B** 1ST WITH WESTLAKE CONNECTION
- C** 1ST TO UPTOWN (NO WESTLAKE CONNECTION)
- D1** 3RD TO SEATTLE CENTER
- D2** 3RD TO WESTLAKE
- E** 1ST—SODO EXTENSION
- F** WATERFRONT STREETCAR



Tier 1 Alignment Alternatives



4th and 5th Avenue Couplet



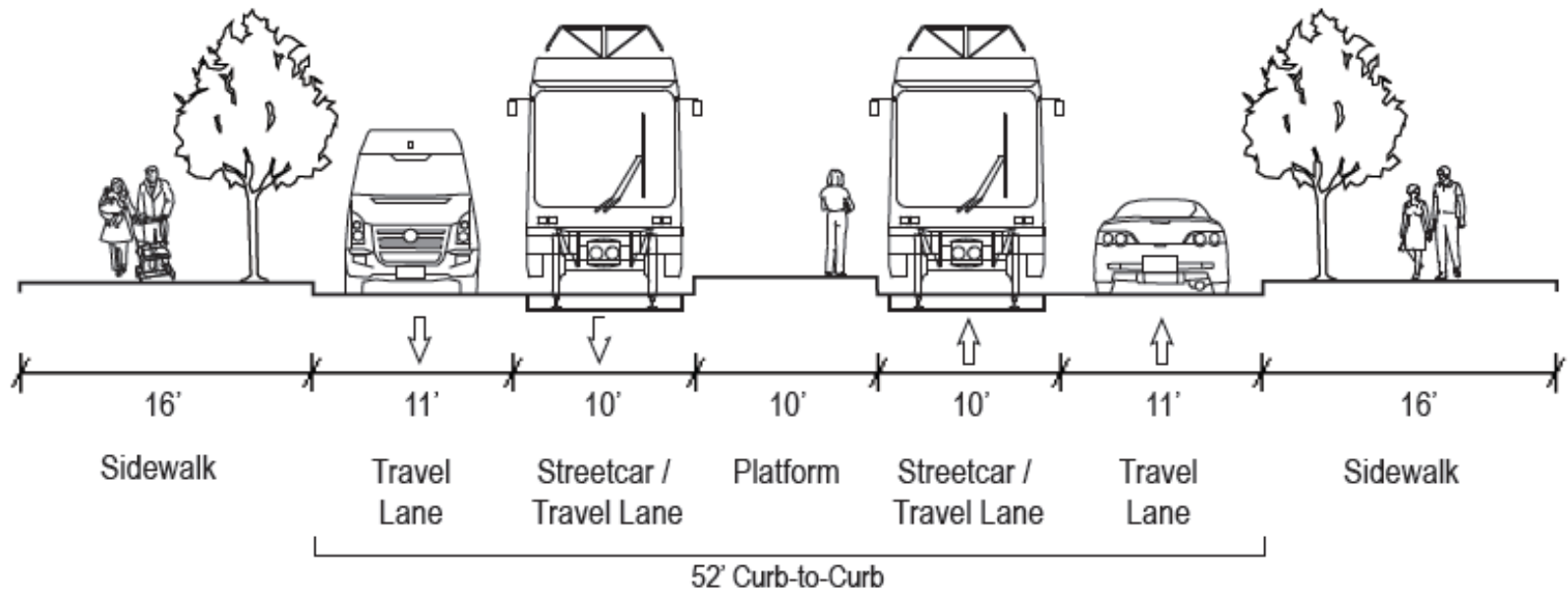
1st Avenue

1st Avenue

- **Exclusive & Mixed-Traffic Alternatives** operate in center lane

At Stations (Madison Looking North)

1st @ Madison

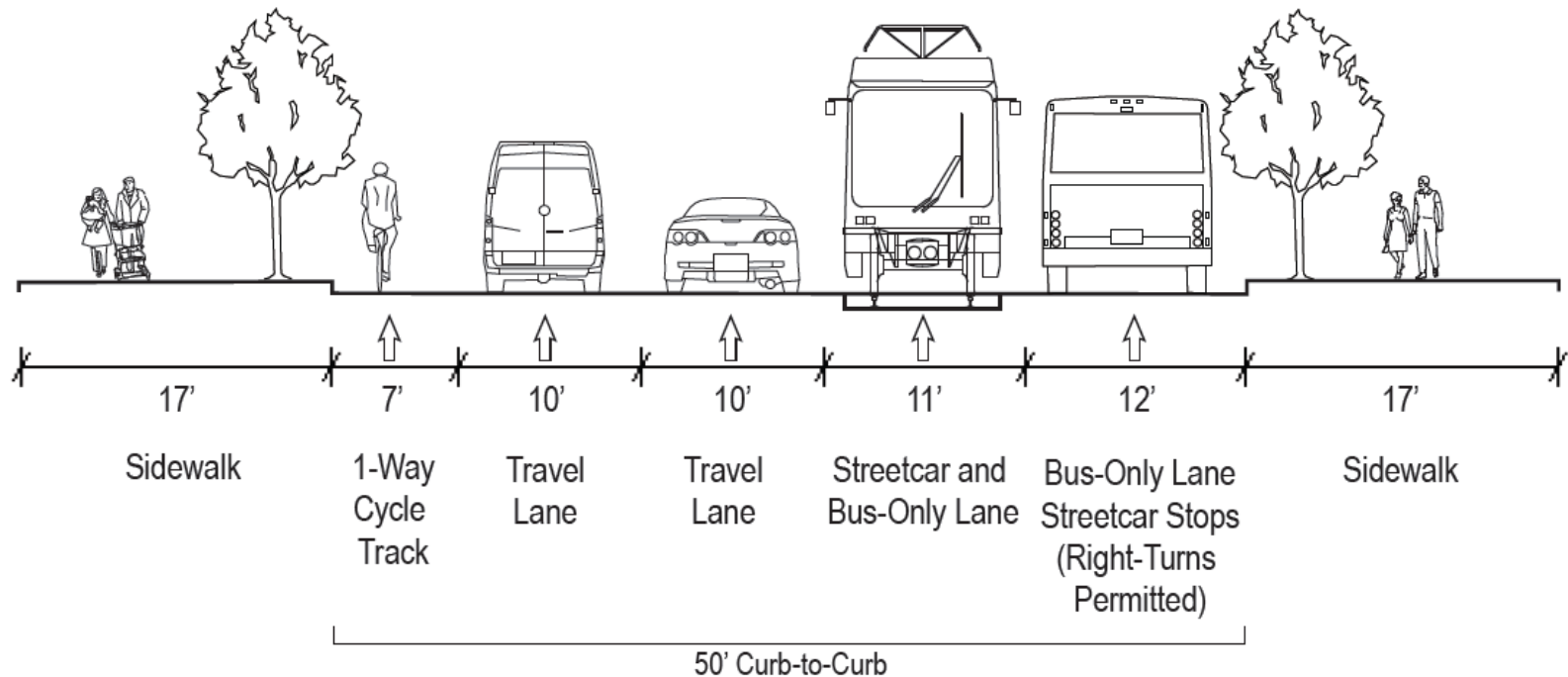


4th and 5th Avenue Couplet

- **Exclusive Alternative** has two transit-only lanes on 4th Avenue (below)

Between Stations (Marion Looking North)

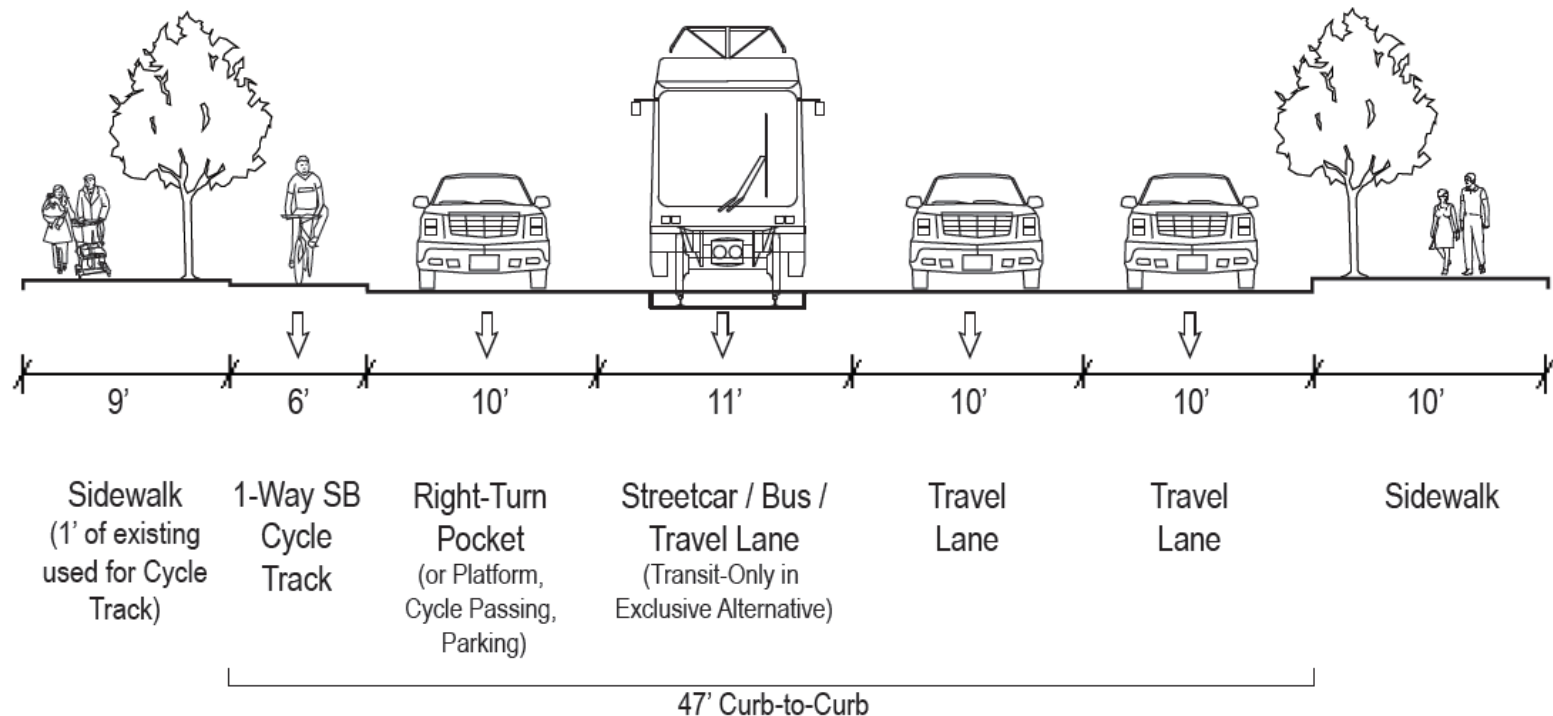
4th @ Marion



4th and 5th Avenue Couplet

- 5th Avenue cross section is the same for Exclusive & Mixed-Traffic
- Exclusive transit lane only feasible Spring to Cherry

Central Portion of 5th with Right-Turn Pocket (Columbia looking North)



5th @ Columbia

Tier 1 Analysis

- **Purpose:** To narrow alternatives for more detailed evaluation in Tier 2
- 5 goals, 15 measures
- Scorecard approach
- Rated (Best, Good, Fair, Poor)

	Evaluation Measures	4th/5th Avenues		1st Avenue	
		Mixed-Traffic	Exclusive	Mixed-Traffic	Exclusive
ENHANCE	Streetcar Travel Times	Fair	Good	Fair	Best
	Auto Travel Times / Relative Traffic Diversion Impacts	Fair	Fair	Best	Fair
	Bus Travel Time and Reliability Impacts: Aggregate Bus Delay	Poor	Fair	Best	Best
	Bus Travel Time and Reliability Impacts: Aggregate Bus Passenger Delay	Poor	Fair	Best	Best
CONNECT	Multimodal Conflicts (Bike, Pedestrian, Bus, and Freight)	Fair	Poor	Best	Best
	Ridership Potential	Good	Best	Good	Best
	Annual Operating & Maintenance Costs	Fair	Good	Fair	Best
	Capital Costs	Best	Good	Good	Fair
DEVELOP	On-Street Parking Impacts	Best	Fair	Good	Fair
	Economic Development Opportunities	Good	Good	Best	Best
THRIVE	Access to Jobs	Good	Good	Good	Good
	Access for Vulnerable Residents and to Social Services and Affordable Housing	Good	Good	Good	Good
	Access to Tourist Destinations, Civic and Cultural Assets, and Open Spaces	Good	Good	Best	Best
	Public Support (based on first Open House) and Stakeholder Support	Fair	Fair	Best	Best
SUSTAIN	Urban Form and Placemaking Opportunities and Improvement Potential	Good	Good	Best	Best

Key Findings from Tier 1 Analysis

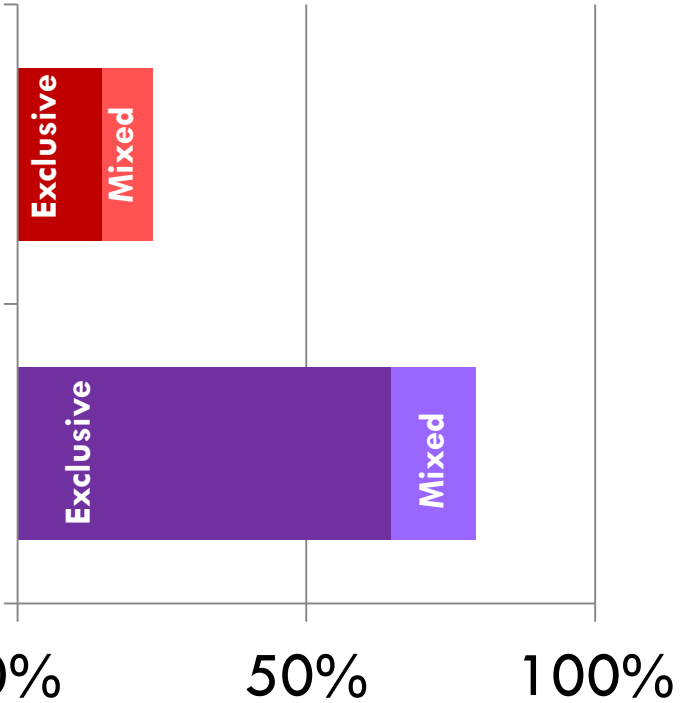
- Ridership demand is comparable for both alignments
- 1st Avenue Exclusive alternative has fastest travel time between Westlake and Jackson
- 4th/5th alignments have more modal conflicts and increase travel time (vs. no build) for more non-streetcar travelers
- 1st Avenue provides greater opportunity to spur redevelopment, improve street conditions, and support local business districts



June Open House

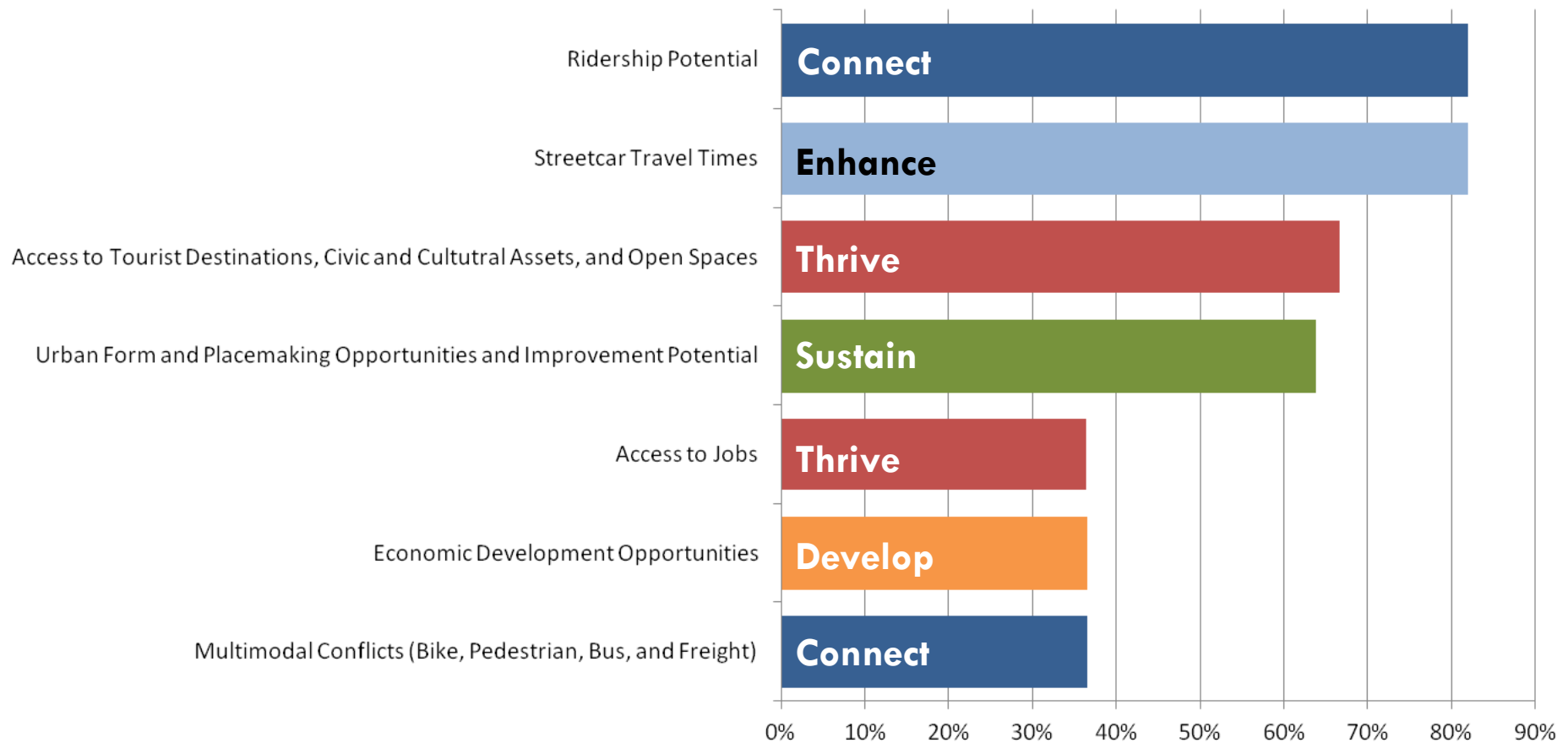


4th/5th Avenues



1st Avenue

Open House - What Matters?

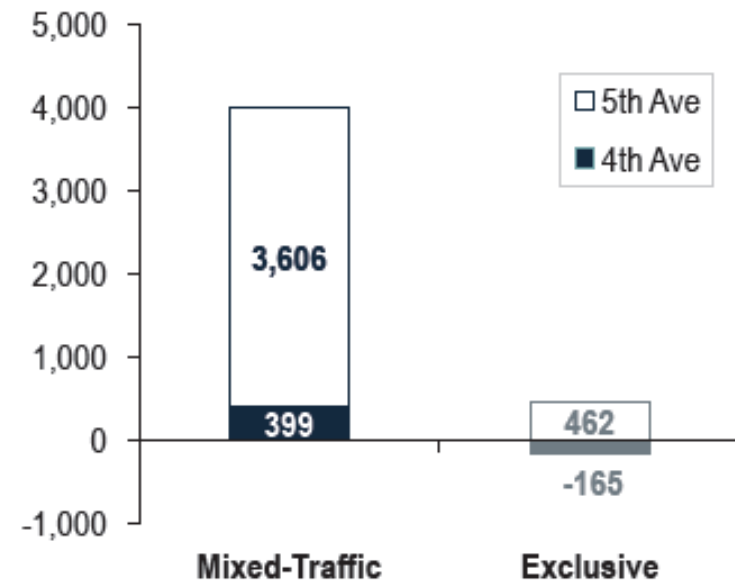


What Matters to Agency Partners?

Bus Operations Impacts



Additional Hours of Bus Passenger Delay (PM Peak Hour)



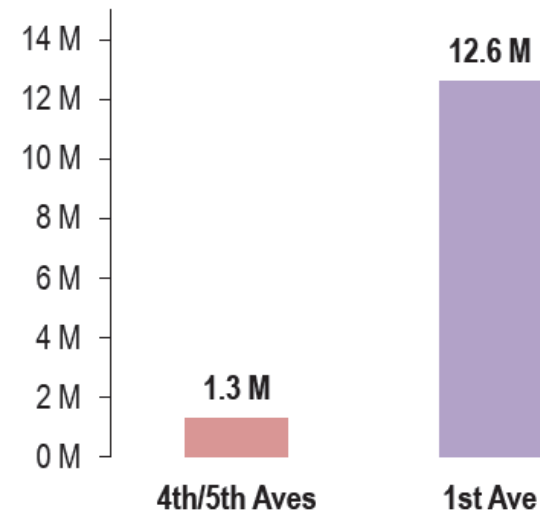
What Matters to Key Stakeholders?

- Modal integration – bikes, auto traffic
- Support business districts, connect cultural/visitor attractions



4th/5th Avenues have more conflicts with local regional bus and planned bike facilities

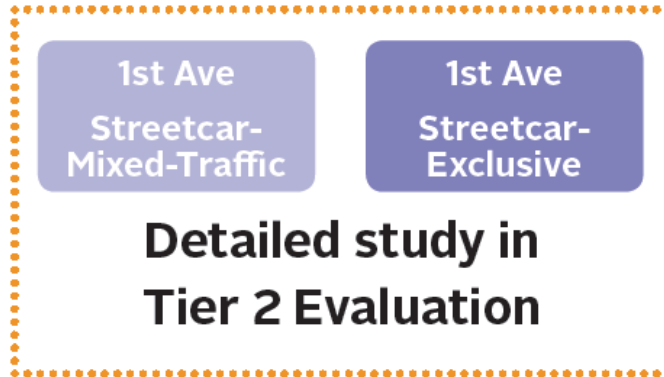
Number of Visitors, 2011



1st Avenue Supports More Visitor Activity

Alternatives Recommended to Advance to Tier 2

1st Avenue Alternatives



Tier 2 Evaluation

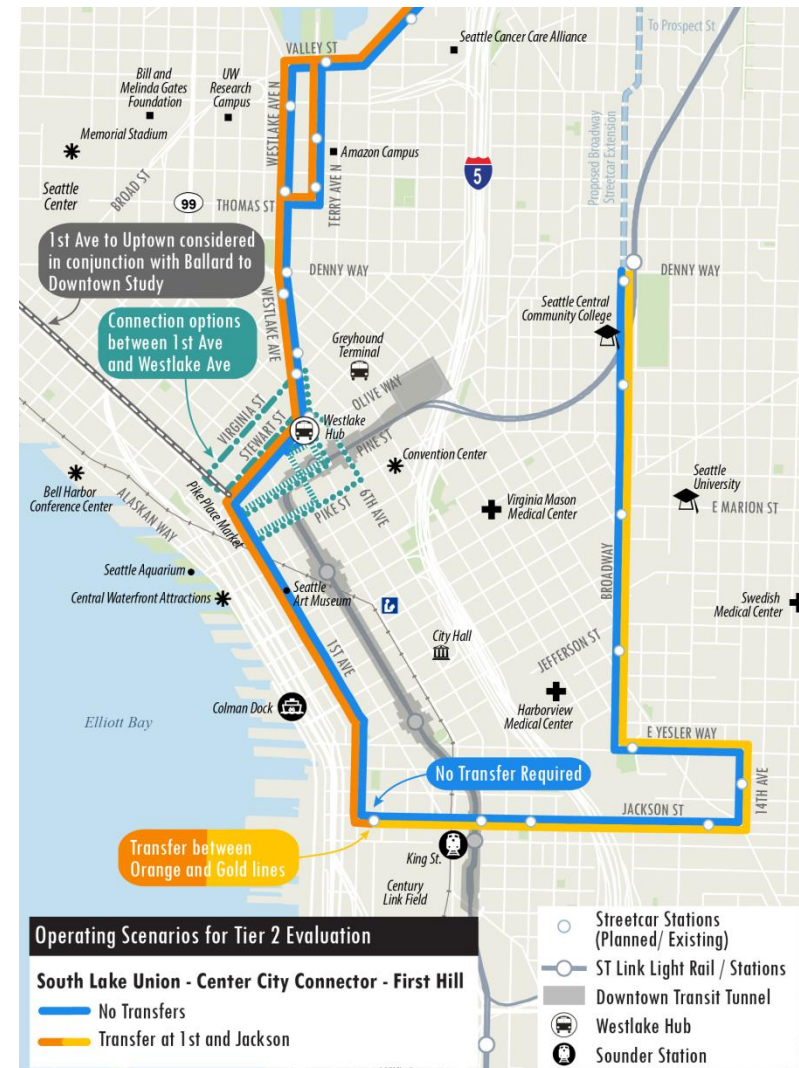


4th/5th Avenue Alternatives



Operating Plan Considerations

- Options to interline Connector with SLU & First Hill
- Exclusive running alternatives will explore improvements to Westlake Segment of SLU



What happens next?

- Further define remaining alternatives
- Complete detailed analysis of alternatives
- Public Open House #3 – Sept/Oct

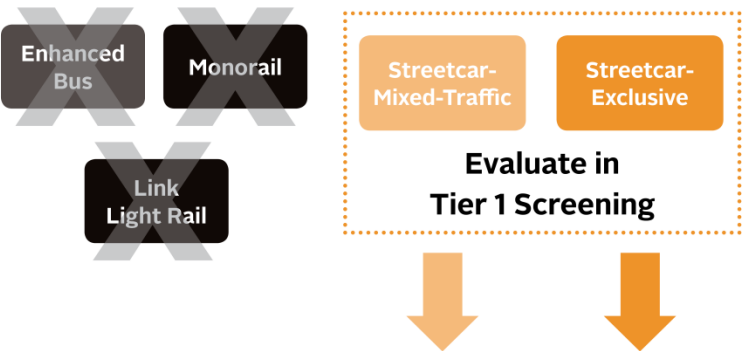




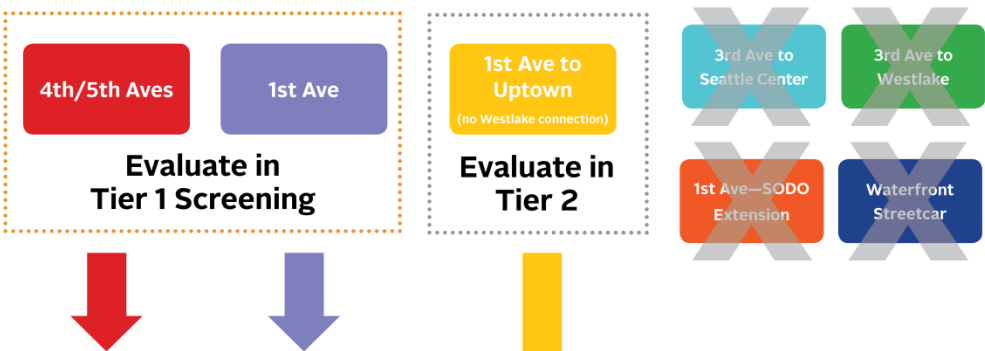


SCREENING OF ALTERNATIVES

Initial Screening: Modes



Initial Screening: Alignments

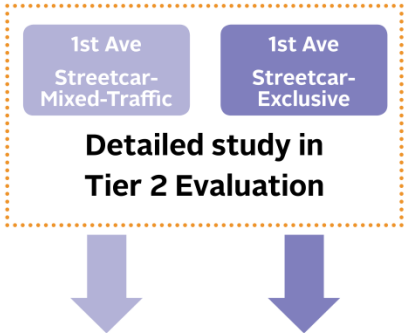


Tier 1 Screening: Alignment + Mode Alternatives

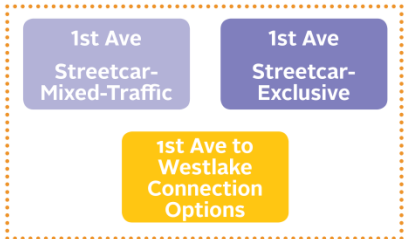
4th/5th Avenue Alternatives



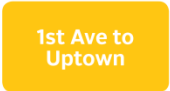
1st Avenue Alternatives



Tier 2 Evaluation



Consider in conjunction with
Ballard to Downtown Study

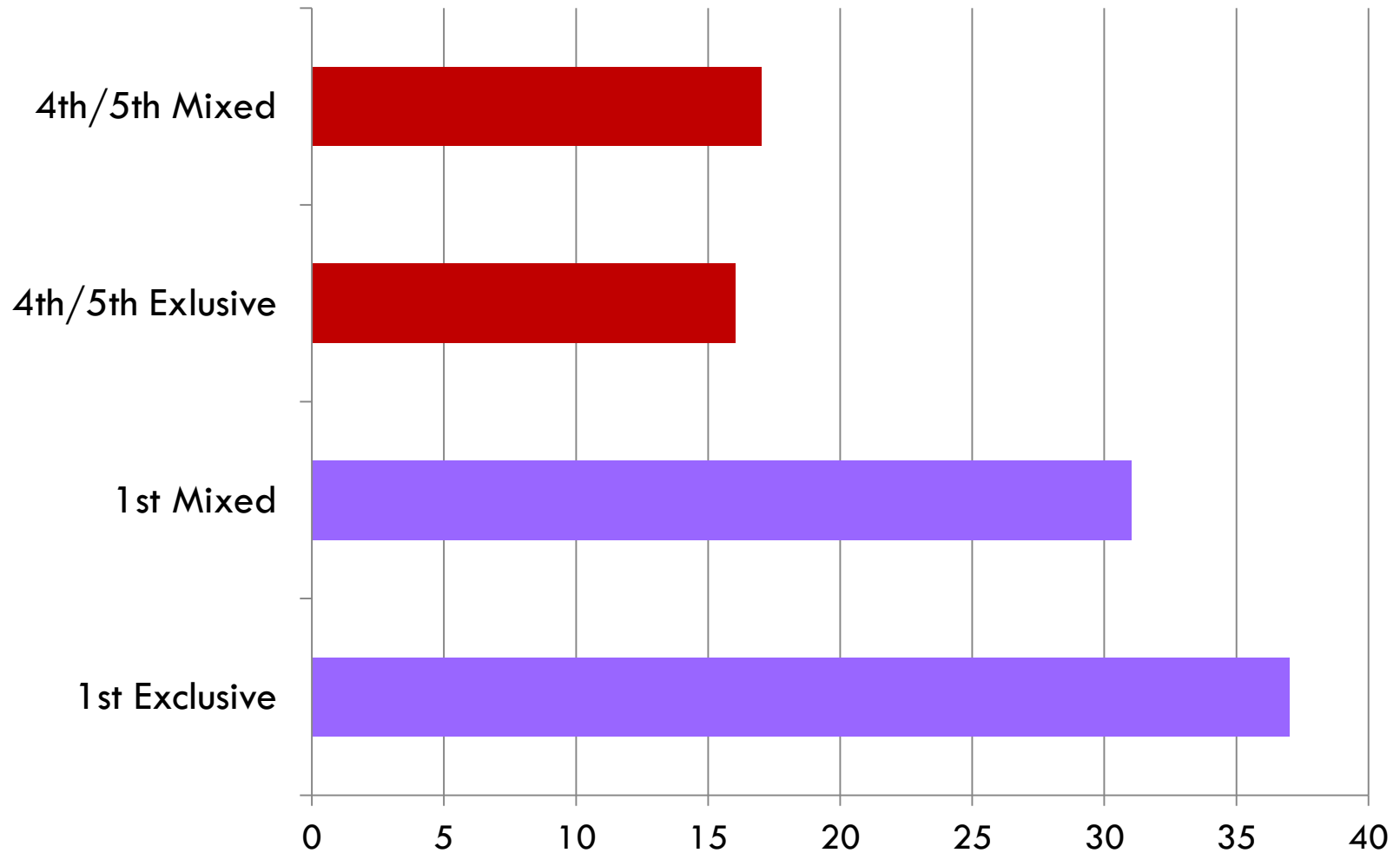


Stakeholder Interviews - Major Conclusions

- 1st phase – connect South Lake Union and First Hill
- Vast majority support 1st Avenue alignment
- Almost unanimous support for streetcar vs. bus mode
- Most believe mixed-traffic operations will be necessary given limited north-south rights of way

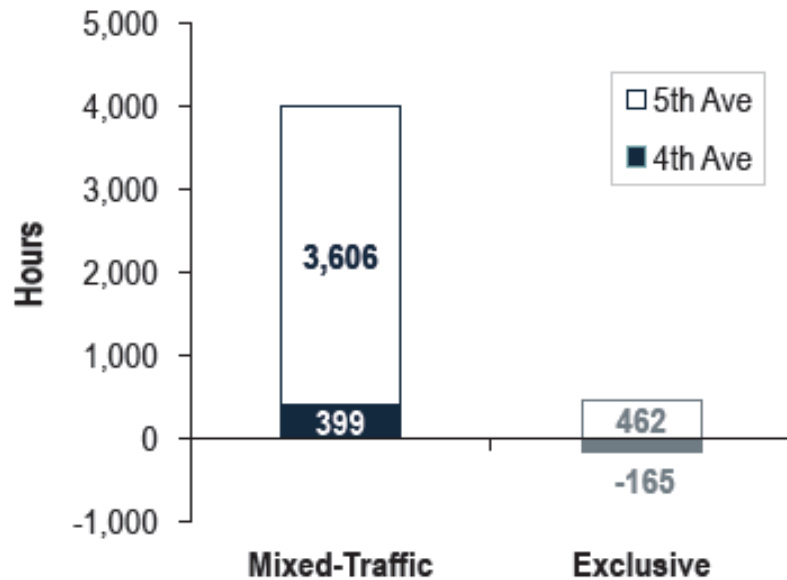


Cumulative Result of Tier Evaluation Measures



Delay to Bus Passengers

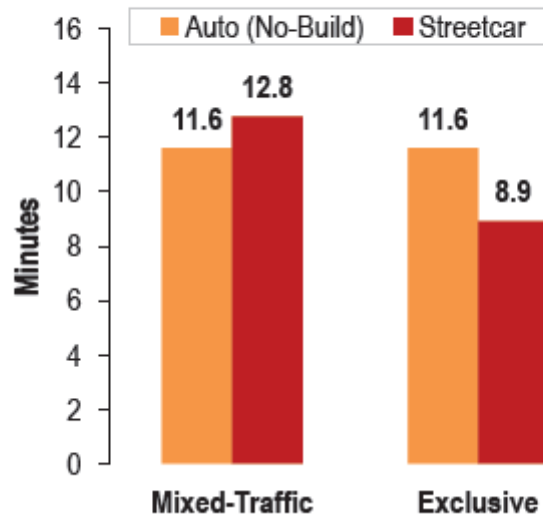
Additional Hours of Bus Passenger Delay (PM Peak Hour)



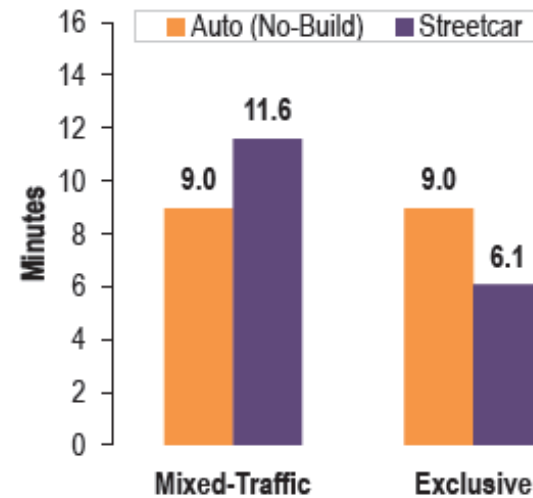
A 4TH/5TH AVENUE		B 1ST AVENUE	
Mixed Streetcar	Exclusive Streetcar	Mixed Streetcar	Exclusive Streetcar
Poor	Fair	Best	Best

Streetcar Travel Times

One-Way Streetcar Travel Times vs. Auto (No-Build)



4th/5th Avenues



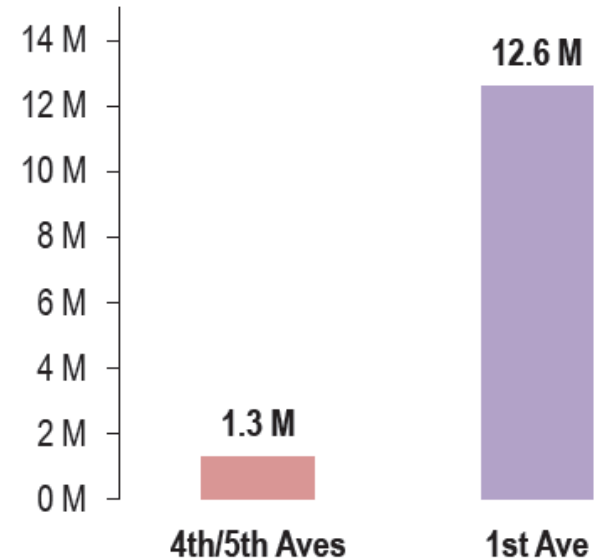
1st Avenue

A 4TH/5TH AVENUE		B 1ST AVENUE	
Mixed Streetcar	Exclusive Streetcar	Mixed Streetcar	Exclusive Streetcar
Fair	Good	Fair	Best

Access to Tourist and Visitor Destinations



Number of Visitors, 2011



A 4TH/5TH AVENUE		B 1ST AVENUE	
Mixed Streetcar	Exclusive Streetcar	Mixed Streetcar	Exclusive Streetcar
Good	Good	Best	Best

Urban Form and Placemaking Opportunities

1st Avenue



IMPROVEMENT POTENTIAL	A 4TH/5TH AVENUE		B 1ST AVENUE	
	Mixed Streetcar	Exclusive Streetcar	Mixed Streetcar	Exclusive Streetcar
Sidewalks and Pedestrian Amenities	Good	Good	Best	Best
Pedestrian Crossings	Fair	Fair	Good	Good
Transit Facilities	Fair	Fair	Good	Good
Placemaking	Good	Good	Best	Best
Small Business Opportunities	Good	Good	Best	Best